NWS FORM E-5 U.S. DEPARTMENT OF COMMERCE	HSA OFFICE:
NOAA, NATIONAL WEATHER SERVICE	Grand Rapids, MI
	REPORT FOR (MONTH &YEAR):
	February 2004
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS	
	DATE:
	March 15, 2004
TO: NATIONAL WEATHER SERVICE (W/OH12X1)	
HYDROMETEOROLOGICAL INFO CENTER	SIGNATURE:
1325 EAST-WEST HIGHWAY,RM 7116	MIC
SILVER SPRING, MD 20910	Service Hydrologist

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (WSOM E-41).

X

An X inside this box indicates that no flooding occurred within this Hydrologic Service Area.

No significant flooding occurred in the Grand Rapids Hydrologic Service Area (HSA) during the month of February.

February Precipitation

February precipitation totals at first order and contract stations across our HSA were below normal. Monthly precipitation totals at Grand Rapids, Lansing, and Muskegon, were 1.03, 0.55, and 0.57 inches, respectively. Precipitation for the month at these three sites varied from 0.51 of an inch below normal at Grand Rapids, 0.90 of an inch below normal at Lansing, to 1.01 inches below normal at Muskegon, Michigan.

Snowfall totals varied from 13.0 inches at Grand Rapids (0.8 of an inch above normal), 7.2 inches at Lansing (3.4 inches below normal), to 8.5 inches at Muskegon (9.8 inches below normal). Snow depths at the end of the month were near to below normal and varied from 0 to 12 inches in our HSA with the lowest amounts near the Indiana state line, and the highest amounts in the counties along Lake Michigan, and in Osceola and Clare Counties. Snow water equivalents across the area ranged from zero to just over 2 inches. Frost depths across the HSA were from 0 to 6 inches.

February Temperatures

Temperatures for the month of February were near to above normal. At Grand Rapids the average monthly temperature was 25.6 (+0.6 above normal), at Lansing 23.3 (-0.7 below normal), and at Muskegon 26.7 (+1.3 degrees above normal).

Flood Potential Outlooks

The Hydrologic outlook in February indicated little potential for flooding due to snowmelt in our HSA, however the possibility of ice jams was mentioned.

February River Levels

Above freezing temperatures at the end of the month resulted in a significant melting of the snowpack, which resulted in river levels in our HSA by the end of February being slightly above to near normal in flows. An extensive ice cover existed on rivers in the Grand River Basin, and in river basins North.

Hydrologic Products issued this month:

- 1 Hydrologic Statements (ARBRVSGRR) was issued.
- 1 Hydrologic Outlook (ARBESFGRR) was issued.
- 29 Hydrologic Summarys (ARBRVAGRR) were issued.